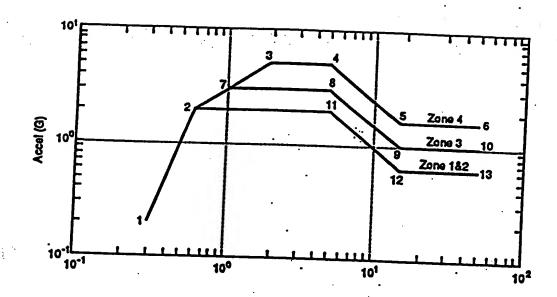


Earthquake Synthesized Waveform - VERTEQII

Fig 1A



Coordinate Point	(H2)	Values for Upper Floor Acceleration (2)	Coordinate Point	Frequency (Hz)	Values for Upper Floor Acceleration (g)
	Zones 1	and 2		Zor	
1	0.3	0.2	1	0.3	
2	0.6	2.0	2	0.6	0.2
11	5.0	2.0			2.0
12			3	2.0	5.0
	15.0	0.6	4	5.0	5.0
13	50.0	0.6	5	15.0	1.6
_	Zone	3	6	50.0	
1	0.3	0.2	<del></del>	30.0	1.6
2	0.6	2.0			
7	1.0	3.0			
8	5.0	3.0			
9	15.0	1.0			
10	50.0	1.0	<u>.                                      </u>		

Fig 1B

::

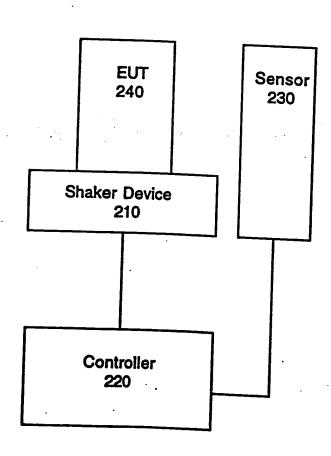
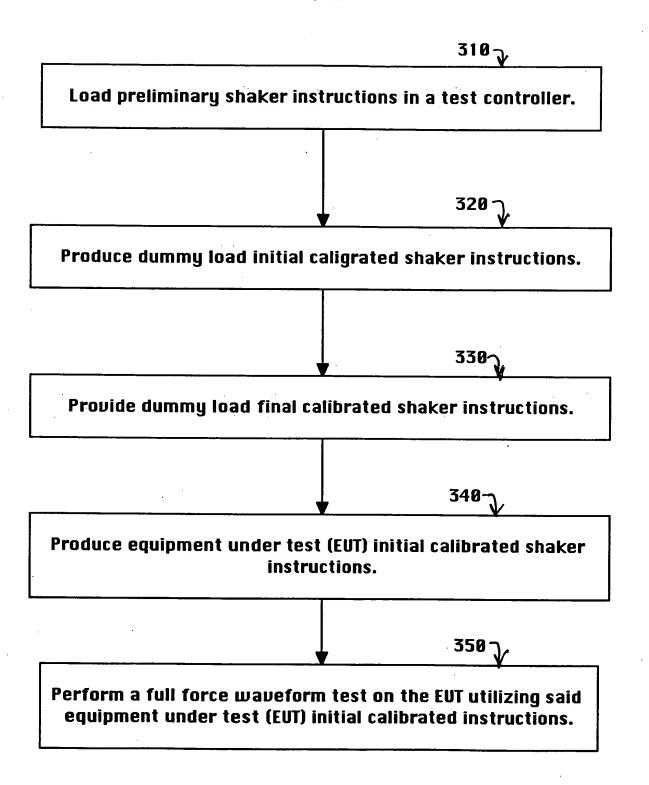


FIG 2



**322**  $\sqrt{ }$ 

Shake a dummy load at a first attenuated value of the preliminary shaker instructions.

323 **^** 

Measure the actual accceleration time history movement of the dummy load when shook at the attenuated value of the preliminary shaker instructions.

324

Analyze if a dummy load attenuated test response spectrum (TRS) is projected to be within acceptable range of a required response sepctrum(RRS) requirements.

325 ე

Make adjustments in the preliminary shaker instructions to produce the dummy load initial calibrated shaker instructions, the adjustments calculated to bring a dummy load full strength test response spectrum within acceptable range of the required response spectrum (RRS)

333 ~

Measure the actual acceleration time history movement of the dummy load when shook at the full strength value of the dummy load initial calibrated shaker instructions.

334 -

Determine if the dummy load full strength test response spectrum (TRS) is within an acceptable range of the required response spectrum (RRS).

335 -

Make adujustments in the dummy load initial calibrated shaker instructions to produce the dummy load final calibrated shaker instructions, the adjustments calculated to brnig a test respons spectrum (TRS) within an acceptable range of the required response spectrum (RRS).

343-

Measure the actual acceleration time history movement of the equipment under test when shook at the attenuated value of the predetermined waveform.

344

Determine if the equipment under test attenuated test response spectrum (TRS) is within an acceptable range of the required repsonse spectrum (RRS).

345~

Make adjustments to the dummy load final calibrated shaker instructions to produce the equipment under test attenuated shaker instructions if the dummy load full strength test response spectrum (TRS) is not within an acceptable range of the required response spectrum (RRS).

352-Shake equipment under test at a full strength value of the equipment under test final calibrated shaker instructions. Marie Marie Tale 353 <sub>\(\)</sub> Measure the actual acceleration time history movement of the equipment under test when shook at the full strength value of the predetermined waveform. 354 Determine if the test response spectrum (TRS) is wihin acceptable range of the required response spectrum (RRS).

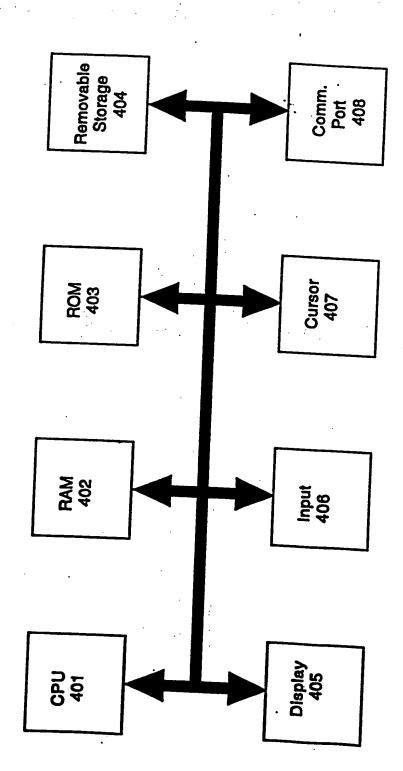
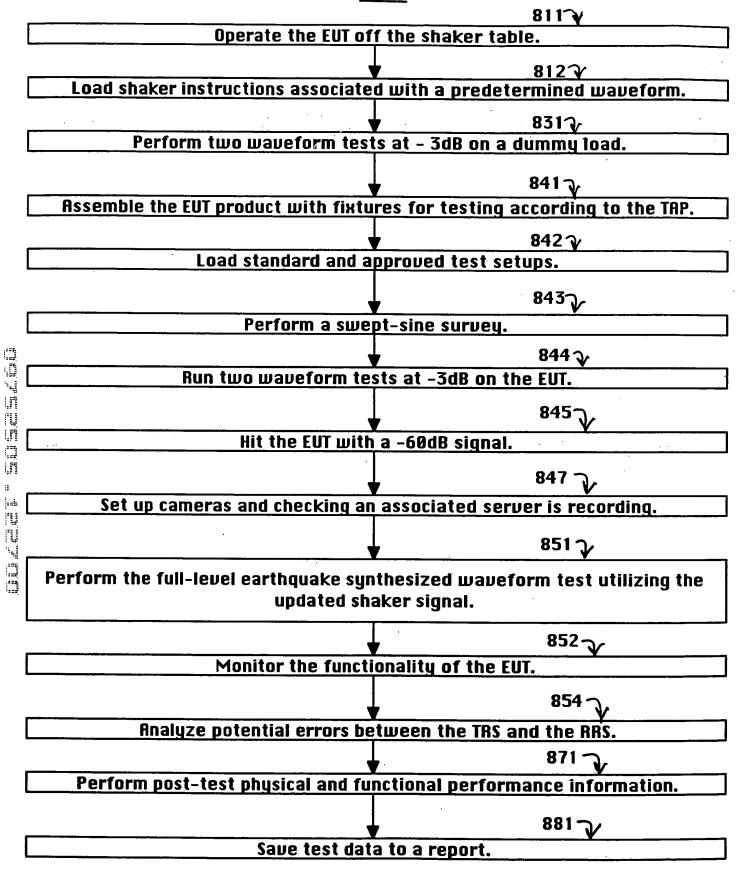


FIG 4

610-Determine if it is approriate to test the EUT at a frame-level or a shelf-level. 620 Configure a frame to a known realistic configuration per an anticipated end-use installation. 630 Preform a pre-test inspection process to detemine the pre-test condition of the EUT. 640 Perform an end use compensation process that compensates for impacts from end use apenditures anticipated to be coupled to the EUT.

. Test Parameter	Performance Criteria	Test Tolerance	
VERTEQII waveform	TRS shall meet or exceed RRS	TRS less than 30% over RRS from 1 to 7	
Acceleration	synthesized waveform 1.6 G peak for 30 seconds		
data sample rate	200 Hz		
test frame system		Not Applicable	
weight	435 lbs (approximately)	+/- 5%	
oad-cell torque	up to 65 ft-lbs .		
Displacement		+/- 1 ft-lb	
rack top)	76.2 mm maximum	+/- 5 mm	

FIG 7



Test Parameter	Performance Criteria	Test Tolomo
Frequency Range Sweep Rate Acceleration data sample rate test frame system weight	1 to 50 Hz 1.0 octave/minute 0.2 G's 200 Hz 435 lbs (approximately)	Not Applicable Not Applicable +/- 0.02 G's Not Applicable +/- 5%

FIG 9

: Model #	Code No	_		•	
:	- Code Mai	me	Busine	ss Unit	BU Conta
	Vertical				•
Date	- verucai		Front-to	-Back	Side-to-Sid
Time	<del> </del>	<u></u> ¦	in.		
Test Engineer or Technician		-			
Frame Top Resonant Frequency (Hz)	·	+		[	
EUT Resonant Frequency (Hz)		十			
Peak Acceleration Response at the top of the Frame (G)		├.			
Displacement (inches or mm)	•			.	•
Joors, Covers, Panels				<u> </u>	
racks, Buckles, Visual					- 1
olt or Anchor Torque values			•	_ _	
oad Cell values (lb, all 4)					·
ED Status during the Test			·	<u> </u>	
agnostic or software action during the Test				İ	
mments				- 1	1

FIG 10